

I. Amendments to the Claims

This listing of claims shall replace all prior versions, and listings, of claims in the application.

Listing of Claims

1-2. (Cancelled)

3. (Currently Amended) A vector comprising:

(a) a DNA sequence encoding a full length MTBN4 polypeptide, wherein the polypeptide is not encoded by the genome of the Bacille Calmette Guerin (BCG) strain of *Mycobacterium bovis*; and

(b) at least one additional DNA sequence encoding a polypeptide which is encoded by *Mycobacterium tuberculosis* but is not encoded by the genome of the Bacille Calmette Guerin (BCG) strain of *Mycobacterium bovis*; and

~~(c) a regulatory sequence operationally linked to said each DNA sequence being operationally linked to a~~ said regulatory sequence allowing expression of the polypeptide encoded by said each DNA sequence in a cell.

4. (Currently Amended) A vector comprising:

(a) a DNA sequence encoding a segment of a full length MTBN4 polypeptide, wherein said segment retains an antigenic property of the polypeptide and wherein the segment is not encoded by the genome of the Bacille Calmette Guerin (BCG) strain of *Mycobacterium bovis*; and

(b) at least one additional DNA sequence encoding a segment of a full length polypeptide which is encoded by *Mycobacterium tuberculosis* but is not encoded by the genome of the Bacille Calmette Guerin (BCG) strain of *Mycobacterium bovis*; and

~~(c) a regulatory sequence operationally linked to said each DNA sequence being operationally linked to a~~ said regulatory sequence allowing expression of the segment encoded by said each DNA sequence in a cell.

5. (Original) A cell transformed with the vector of claim 3.

6. (Original) A cell transformed with the vector of claim 4.

7. (Currently Amended) A composition comprising a vector and a pharmaceutically acceptable diluent or filler, wherein the vector comprises a DNA sequence encoding a full length MTBN4 polypeptide and wherein the polypeptide is not encoded by the genome of the Bacille Calmette Guerin (BCG) strain of *Mycobacterium bovis* and at least one additional DNA sequence encoding a polypeptide which is encoded by *Mycobacterium tuberculosis* but is not encoded by the genome of the Bacille Calmette Guerin (BCG) strain of *Mycobacterium bovis*.

8. (Cancelled)

9. (Previously Presented) A composition comprising:

at least two DNA sequences, each encoding a polypeptide of the *Mycobacterium tuberculosis* complex that is not a polypeptide encoded by the genome of the Bacille Calmette Guerin (BCG) strain of *Mycobacterium bovis*, and each being operationally linked to a regulatory sequence which allows expression of said polypeptide in a cell of a vertebrate, wherein at least one of said DNA sequences encodes a full length MTBN4 polypeptide.

10. (Previously Presented) A composition comprising:

at least two DNA sequences, each encoding a polypeptide of the *Mycobacterium tuberculosis* complex that is not a polypeptide encoded by the genome of the Bacille Calmette Guerin (BCG) strain of *Mycobacterium bovis*, and each being operationally linked to a regulatory sequence which allows expression of said polypeptide in a cell of a vertebrate, wherein at least one of said DNA sequences encodes a segment of a full length MTBN4 polypeptide, wherein said segment retains an antigenic property of the polypeptide.

11-54. (Cancelled)